PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY					REC'D 1 4 JUN 2005
То:					PET
	see form	 PCT/ISA/220		INTERNATION	TEN OPINION OF THE NAL SEARCHING AUTHORITY PCT Rule 43 <i>bis</i> .1)
				Date of malling (day/month/year) see	e form PCT/ISA/210 (second sheet)
	licant's or agent's file form PCT/ISA/2			FOR FURTHER A See paragraph 2 below	
	mational application T/IB2005/050265		International filing date (c 24.01.2005	day/month/year)	Priority date (day/month/year) 30.01.2004
G0:	mational Patent Clas 2B3/14, G02B26/ licant NINKLIJKE PHIL	02, G02B7/02	both national classification ONICS N.V.	and IPC	
1. This opinion contains indications relating to the following items: □ Box No. I □ Basis of the opinion □ Box No. II □ Priority □ Box No. III □ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability □ Box No. IV □ Lack of unity of invention □ Box No. V □ Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement □ Box No. VI □ Certain documents cited □ Box No. VII □ Certain defects in the international application □ Box No. VIII □ Certain observations on the international application □ Box No. VIII □ Certain observations on the international application 2. FURTHER ACTION If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.					
3.	For further detail	ls, see notes to l	Form PCT/ISA/220.		

Name and mailing address of the ISA:



European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 Authorized Officer

THEOPISTOU, P

Telephone No. +49 89 2399-2471



WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050265

-	Box	No. I Basis of the opinion			
1.	With the I	regard to the language , this opinion has been established on the basis of the international application in anguage in which it was filed, unless otherwise indicated under this item.			
		This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).			
2.	With nece	regard to any nucleotide and/or amino acid sequence disclosed in the international application and essary to the claimed invention, this opinion has been established on the basis of:			
	a. ty	pe of material:			
		a sequence listing			
		table(s) related to the sequence listing			
b. format of material:					
	. [in written format			
		in computer readable form			
	c. tin	ne of filing/furnishing:			
		contained in the international application as filed.			
		filed together with the international application in computer readable form.			
		furnished subsequently to this Authority for the purposes of search.			
3.	(in addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.			
4.	Addit	ional comments:			

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

No: Claims

1-2,4,5,6,7,11,12,13,14,15

Inventive step (IS)

Yes: Claims

No: Claims

1-15

Industrial applicability (IA)

Yes: Claims

1-15

No: Claims

2. Citations and explanations

see separate sheet

Re Item V.

- 1 Reference is made to the following documents:
 - D1: US 2001/017985 A1 (TSUBOI TAKAYUKI ET AL) 30 August 2001 (2001-08-30)
 - D2: WO 03/069380 A (KONINKLIJKE PHILIPS ELECTRONICS N.V; FEENSTRA, BOKKE, J; KUIPER, STEIN) 21 August 2003 (2003-08-21)
 - D3: US-B1-6 369 954 (BERGE BRUNO ET AL) 9 April 2002 (2002-04-09)
 - D4: US-A-5 739 959 (QUAGLIA ET AL) 14 April 1998 (1998-04-14)
 - D5: US-A-5 446 591 (MEDLOCK ET AL) 29 August 1995 (1995-08-29)

2 ARTICLE 6 PCT

Although claims 1, 11, 13 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other with regard to the definition of the subject-matter for which protection is sought. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

3 INDEPENDENT CLAIM 1

- 3.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

 Document D1 discloses (the references in parentheses applying to this document):

 Variable focus lens package (Fig. 1-3,20,23), comprising:
 - a body (105,103,7), which is provided with a through-hole (cf. par. [0045])) for providing a light path through the body, wherein at least a surface layer of the body (103,11) comprises an electrically conducting material;
 - covers (102, 106) for closing off the through-hole, which are optically transparent in the light path;
 - an electrically insulating fluid (122) and an electrically conducting fluid (121), which are contained by a fluid chamber enclosed by the covers and an inner surface of the

through-hole of the body, which are non-miscible, and which are in contact over a meniscus (124), wherein a shape of the meniscus (124) is variable under the application of a voltage between the electrically conducting surface of the body and the electrically conducting fluid (121);

- an electrically insulating layer (104) covering at least the portion of the surface of the body contacting the electrically conducting fluid (cf. par. [0170]);
- sealing means for sealing the fluid chamber (cf. par. [0047])); and
- clamping means for fixing the body, the covers and the sealing means with respect to each other under the exertion of clamping forces.

Although clamping means are not explicitly mentioned, still they are considered implicit since the device is to be held together and form a hermetic seal (cf. par. [0047]).

For reasons of completeness, it is noted that D4 or D5 disclose typical clamping means to use with fluid lenses (Art. 33(3) PCT).

4 INDEPENDENT CLAIM 11

4.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 11 is not new in the sense of Article 33(2) PCT. Claim 11 differs from claim 1 in that it does not mention the clamping means but that at least one of the covers is capable of functioning as a lens. This feature is dislosed in Fig. 23 and the related text of D1.

5 INDEPENDENT CLAIM 13

5.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 13 is not new in the sense of Article 33(2) PCT.

Claim 13 differs from claim 1 in that it does not mention the clamping means but the structure of the electrical connectors for applying a voltage. This feature is dislosed in Fig. 1-3 and the related text of D1.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/IB2005/050265

DEPENDENT CLAIMS 2-10, 12, 14, 15
Dependent claims 2-10, 12, 14, 15 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), because they relate to features either known or disclosed in the available prior art.

PATENT COOPERATION TREATY

	4	
i d		•

From the INTERNATIONAL SEARCHING AUTHORITY

	REC'D	1	4	JUN	2005	
D	WAS				PCT]
ı						

То:			
	••		

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43*bis*.1)

<u> </u>	(day///ionii/year/	See total Political Second Sileety
	Date of mailing	see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference see form PCT/ISA/220

PCT/B2005/050265

FOR FURTHER ACTION
See paragraph 2 below

International application No. International filing date (day/month/year)

Priority date (day/month/year) 30.01.2004

International Patent Classification (IPC) or both national classification and IPC

24.01.2005

G02B3/14, G02B26/02, G02B7/02

Applicant

KONINKLIJKE PHILIPS ELECTRONICS N.V.

1.	This opinion	contains	indications	relating to	the	following	items:
----	--------------	----------	-------------	-------------	-----	-----------	--------

Box No. 1 Basis of the opinion

Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial

applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of malling of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:

Authorized Officer



European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465

THEOPISTOU, P

Telephone No. +49 89 2399-2471



WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050265

· 	Во	x N	o. I Basis of the opinion				
1.	. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.						
		lar	is opinion has been established on the basis of a translation from the original language into the following nguage , which is the language of a translation furnished for the purposes of international search nder Rules 12.3 and 23.1(b)).				
2.	Wit ned	th re cess	gard to any nucleotide and/or amino acid sequence disclosed in the international application and eary to the claimed invention, this opinion has been established on the basis of:				
	a. t	ype	of material:				
			a sequence listing				
			table(s) related to the sequence listing				
	b. format of material:						
	•		in written format				
		□.	in computer readable form				
	c. t	ime	of filling/furnishing:				
			contained in the international application as filed.				
•			filed together with the international application in computer readable form.				
			furnished subsequently to this Authority for the purposes of search.				
3.		ha co	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto s been filed or furnished, the required statements that the information in the subsequent or additional pies is identical to that in the application as filed or does not go beyond the application as filed, as propriate, were furnished.				
4.	Add	ditio	nal comments:				

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050265

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

No: Claims

1-2,4,5,6,7,11,12,13,14,15

Inventive step (IS)

Yes: Claims

No: Claims

1-15

Industrial applicability (IA)

Yes: Claims

1-15

No: Claims

2. Citations and explanations

see separate sheet

Re Item V.

1 Reference is made to the following documents:

D1: US 2001/017985 A1 (TSUBOI TAKAYUKI ET AL) 30 August 2001 (2001-08-30)

D2: WO 03/069380 A (KONINKLIJKE PHILIPS ELECTRONICS N.V; FEENSTRA,

BOKKE, J; KUIPER, STEIN) 21 August 2003 (2003-08-21)

D3: US-B1-6 369 954 (BERGE BRUNO ET AL) 9 April 2002 (2002-04-09)

D4: US-A-5 739 959 (QUAGLIA ET AL) 14 April 1998 (1998-04-14)

D5: US-A-5 446 591 (MEDLOCK ET AL) 29 August 1995 (1995-08-29)

2 ARTICLE 6 PCT

Although claims 1, 11, 13 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other with regard to the definition of the subject-matter for which protection is sought. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

3 INDEPENDENT CLAIM 1

- 3.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT. Document D1 discloses (the references in parentheses applying to this document): Variable focus lens package (Fig. 1-3,20,23), comprising:
 - a body (105,103,7), which is provided with a through-hole (cf. par. [0045])) for providing a light path through the body, wherein at least a surface layer of the body (103,11) comprises an electrically conducting material;
 - covers (102, 106) for closing off the through-hole, which are optically transparent in the light path;
 - an electrically insulating fluid (122) and an electrically conducting fluid (121), which are contained by a fluid chamber enclosed by the covers and an inner surface of the

through-hole of the body, which are non-miscible, and which are in contact over a meniscus (124), wherein a shape of the meniscus (124) is variable under the application of a voltage between the electrically conducting surface of the body and the electrically conducting fluid (121);

- an electrically insulating layer (104) covering at least the portion of the surface of the body contacting the electrically conducting fluid (cf. par. [0170]);
- sealing means for sealing the fluid chamber (cf. par. [0047])); and
- clamping means for fixing the body, the covers and the sealing means with respect to each other under the exertion of clamping forces.

Although clamping means are not explicitly mentioned, still they are considered implicit since the device is to be held together and form a hermetic seal (cf. par. [0047]).

For reasons of completeness, it is noted that D4 or D5 disclose typical clamping means to use with fluid lenses (Art. 33(3) PCT).

4 INDEPENDENT CLAIM 11

4.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 11 is not new in the sense of Article 33(2) PCT. Claim 11 differs from claim 1 in that it does not mention the clamping means but that at least one of the covers is capable of functioning as a lens. This feature is dislosed in Fig. 23 and the related text of D1.

5 INDEPENDENT CLAIM 13

5.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 13 is not new in the sense of Article 33(2) PCT.

Claim 13 differs from claim 1 in that it does not mention the clamping means but the structure of the electrical connectors for applying a voltage. This feature is dislosed in Fig. 1-3 and the related text of D1.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/IB2005/050265

DEPENDENT CLAIMS 2-10, 12, 14, 15

Dependent claims 2-10, 12, 14, 15 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), because they relate to features either known or disclosed in the available prior art.